

[0077]     ABSTRACT OF THE DISCLOSURE

[0078]     A network device is connected to a host and performs table accesses on behalf of the host. The network device includes an address table, a register, and table access logic. The address table stores entries. The register is accessible by the host and is configured to store data for an entry in the address table. The table access logic receives a command from the host to insert a new entry in the address table, delete an existing entry from the address table, or search for an entry in the address table. When the command is to insert an entry, the table access logic identifies a location in the address table to store the new entry and stores the data from the register in the address table at the identified location. When the command is to delete an existing entry, the table access logic applies a hashing function to the data in the register, searches the address table to locate one of the entries to delete using the hashed data, and deletes the located entry from the address table. When the command is to search the address table, the table access logic locates one of the entries in the address table using the data from the register and stores the contents of the located entry in the register.